

Application No. 10/686,350
Response to Office Action

Customer No. 01933

Listing of Claims:

1. (Currently Amended) An ink jet printer comprising:
a printing-head which discharges photo-curing ink toward a
printing sheet; and

light irradiation means for irradiating an ink landing
5 surface of the printing sheet with light,

wherein said light irradiation means irradiates the ink
landing surface by optical scanning via a reflecting means
mechanism with rays having a wavelength range in which the photo-
curing ink is cured.

2. (Currently Amended) A printer according to claim 1,
wherein the reflecting ~~means~~ mechanism comprises a polygon
reflecting mirror.

3. (Currently Amended) A printer according to claim 1,
wherein the reflecting ~~means~~ mechanism comprises a swingable
reflecting mirror.

4. (Previously Presented) A printer according to claim 1,
further comprising detection means for detecting a light
quantity, and light quantity control means for controlling an
irradiation energy amount on the basis of the detected light
quantity.

Application No. 10/686,350
Response to Office Action

Customer No. 01933

5. (Currently Amended) An image printing apparatus of an ink jet printing system, comprising:

~~a~~ at least one rotary drum ~~on which adapted to have a~~ printing sheet ~~is~~ wound thereon;

5 ~~an~~ at least one ink jet printer which discharges photo-curing ink in order to print an image on the printing sheet wound around a corresponding said rotary drum; and

~~an~~ at least one irradiation optical path ~~on~~ along which ~~an~~ image printing surface of the printing sheet ~~is irradiated with~~ ays rays having a wavelength at which the photo-curing ink is cured are irradiated to an image printing surface of the printing sheet.

6. (Currently Amended) An apparatus according to claim 5, wherein said ink jet printer comprises:

a printing-head which discharges the photo-curing ink toward the printing sheet, and

5 light irradiation means for irradiating ~~an ink landing the~~ image printing surface surface of the printing sheet with ~~light~~ the rays, and

wherein the light irradiation means irradiates the ink ~~landing~~ image printing surface by optical scanning via a reflecting ~~means~~ mechanism with the rays ~~having a wavelength~~ range in which ink is cured.

Application No. 10/686,350
Response to Office Action

Customer No. 01933

7. (Currently Amended) An apparatus according to claim 6, wherein the reflecting ~~means~~ mechanism comprises a polygon reflecting mirror.

8. (Currently Amended) An apparatus according to claim 6, wherein the reflecting ~~means~~ mechanism comprises a swingable reflecting mirror.

9. (Previously Presented) An apparatus according to claim 6, further comprising detection means for detecting a light quantity, and light quantity control means for controlling an irradiation energy amount on the basis of the detected light quantity.

10. (Currently Amended) An image printing apparatus ~~of an ink jet printing system, comprising according to claim 5,~~
wherein:

the at least one rotary drum comprises two said rotary drums
5 ~~on which printing sheets can be wound;~~

the at least one ink jet printer comprises two said ink jet
~~printers which discharge photo-curing ink in order to print~~
~~images on the printing sheets respectively wound around~~
corresponding to said two rotary drums; and

Application No. 10/686,350
Response to Office Action

Customer No. 01933

10 the at least one irradiation path comprises two said
irradiation optical paths ~~on which image printing surfaces of the~~
~~printing sheets are irradiated with rays having a wavelength at~~
~~which the photo-curing ink is cured, wherein rays on irradiated~~
~~along one of the~~ irradiation optical ~~path paths~~ irradiate the
15 image printing surface of the printing sheet wound around a
corresponding one of the rotary drum drums, and rays ~~on said~~
~~irradiated along the other one of the~~ irradiation optical ~~path~~
~~paths~~ irradiate the image printing surface of the printing sheet
wound around ~~said the other one of the~~ rotary ~~drum drums~~.

11. (Original) An apparatus according to claim 10, wherein
two rays from two predetermined light sources irradiate a polygon
reflecting mirror which rotates, and the two rays reflected by
the polygon reflecting mirror irradiate the image printing
5 surfaces of the printing sheets via the two irradiation optical
paths.

12. (Original) An apparatus according to claim 10, wherein
two rays from two predetermined light sources irradiate a
swingable reflecting mirror which rotates, and the two rays
reflected by the reflecting mirror irradiate the image printing
5 surfaces of the printing sheets via the two irradiation optical
paths.

Application No. 10/686,350
Response to Office Action

Customer No. 01933

13. (Previously Presented) An apparatus according to claim 10, wherein the printing sheet is wound around said one rotary drum with one surface facing outward, and then wound around said other rotary drum with the other surface facing outward.

14. (Previously Presented) A printer according to claim 2, further comprising detection means for detecting a light quantity, and light quantity control means for controlling an irradiation energy amount on the basis of the detected light quantity.

15. (Previously Presented) A printer according to claim 3, further comprising detection means for detecting a light quantity, and light quantity control means for controlling an irradiation energy amount on the basis of the detected light quantity.

16. (Previously Presented) An apparatus according to claim 7, further comprising detection means for detecting a light quantity, and light quantity control means for controlling an irradiation energy amount on the basis of the detected light quantity.

Application No. 10/686,350
Response to Office Action

Customer No. 01933

17. (Previously Presented) An apparatus according to claim 8, further comprising detection means for detecting a light quantity, and light quantity control means for controlling an irradiation energy amount on the basis of the detected light quantity.

18. (Previously Presented) An apparatus according to claim 11, wherein the printing sheet is wound around said one rotary drum with one surface facing outward, and then wound around said other rotary drum with the other surface facing outward.

19. (Previously Presented) An apparatus according to claim 12, wherein the printing sheet is wound around said one rotary drum with one surface facing outward, and then wound around said other rotary drum with the other surface facing outward.